

## Author Index of Volume 24

Abbattista, F., 147, 363  
 Aourag, H., 209  
 Arpaia, M., 373, 525  
 Atmani, H., 535  
 Badini, C., 111  
 Barois, J. M., 189  
 Battaglia, L. P., 25  
 Bazán, J. C., 473  
 Belaïdi, A., 209  
 Bi-Shiou Chiou, 239, 413, 511  
 Blasse, G., 175  
 Bonamartini Corradi, A., 25  
 Brisi, C., 147  
 Brixner, L. H., 175, 353  
 Čabrić, B., 123  
 Campa, J. A., 435  
 Campelo, J. M., 51  
 Cao, C., 343  
 Cao, L., 405  
 Champarnaud-Mesjard, J. C., 321  
 Choma, J., 1, 315  
 Cigna, R., 457  
 Costantini, A., 373, 525  
 Cournil, M., 221  
 Date, S. K., 71  
 Dauger, A., 299  
 Dawidowicz, A. L., 13  
 Delmastro, S., 147  
 Del Rey-Bueno, F., 99  
 Derylo-Marczewska, A., 287  
 Dojčilović, J., 123  
 El Guendouzi, M., 199  
 Falcony, C., 383  
 Fargeot, D., 299  
 Fernández, P., 215  
 Foltynowicz, Z., 443  
 Fouassier, C., 189  
 Frit, B., 321  
 Garcia, A., 51  
 Garcia, M., 383  
 Garcia-Rodriguez, A., 99  
 Geng, L., 343  
 Gillot, B., 199  
 Giusti, J., 25  
 Gonzalez-Pradas, E., 99  
 Górecki, Cz., 399  
 Guo, S. Q., 343  
 Guamano, G., 457  
 Gutiérrez-Puebla, E., 435  
 Horikawa, M., 83, 389  
 Janusz, W., 39  
 Jaromiec, M., 1, 287, 315  
 Jenq-Gong Duh, 239, 413, 511  
 Jungowska, W., 487  
 Kamegashira, N., 83, 389  
 Kharroubi, M., 199  
 Khelifa, B., 209  
 Lee, M. Y., 511  
 Li, D. M., 157, 429  
 Lin, T. Y., 413  
 Lopis, J., 215  
 Lu, X., 1  
 Lucio-Borlera, M., 147  
 Luna, D., 51  
 Ma, Z. Y., 343  
 Madey, R., 1, 315  
 Manfredini, T., 25  
 Manier, M., 321  
 Marczewski, A. W., 287  
 Marinas, J. M., 51  
 Mata-Arjona, A., 99  
 Mazza, D., 147, 363  
 Mei-Ling Chou, 131  
 Mendyk, E., 13  
 Mercurio, D., 299  
 Mercurio, J. P., 321  
 Metz, R., 199  
 Michno, Z., 399  
 Monge, M. A., 435  
 Morterra, C., 247  
 Motori, A., 25  
 Napijalo, M. Lj., 123  
 Napijalo, M. M., 123  
 Novaković, L., 123  
 Onillon, M., 189  
 Onuchukwu, A. I., 337  
 Orio, L., 247  
 Ortiz, A., 383  
 Panagopoulos, C. N., 87  
 Pellacani, G. C., 25  
 Pernice, P., 373, 525  
 Piqueras, J., 215  
 Prat, M. R., 473  
 Quadrini, E., 111  
 Rasines, I., 435  
 Rousset, A., 199  
 Ruiz-Valero, C., 435  
 Saccani, A., 25  
 Sandrolini, F., 25  
 Sarbak, Z., 443  
 Satoh, H., 83  
 Schmidt, J. A., 473  
 Shimono, A., 389  
 Shinde, R. F., 71  
 Shohoji, N., 163  
 Simoncelli, C., 457  
 Sin-Tah Lin, 239  
 Skowronski, J. M., 269  
 Somaiah, K., 353  
 Sridhar Kumar, M. P., 495  
 Srinivasan, V., 495  
 Swamy, C. S., 495  
 Tailhades, P., 199  
 Tang, C. C., 503  
 Tanguy, B., 189  
 Trasatti, S., 327  
 Traversa, E., 457  
 Triboulet, P., 221  
 Umeno, S., 83  
 Vallino, M., 147, 363  
 van der Voort, D., 175  
 van Rosmalen, G. M., 175  
 Venkata Narayana, M., 353

Villafranca-Sanchez, E., 99  
Viswanathan, B., 495

Wan, C. C., 503  
Wang, B., 405

Wang, D. F., 405  
Witkamp, G. J., 175

Yao, C. K., 343, 405  
Yao, M., 157, 429

Yee-Shyi Chang, 131  
Zhang Si Yu, 279  
Zheng Ke Quan, 279  
Znamierowska, T., 487

## Subject Index of Volume 24

**Activated carbons**  
heterogeneous microporous; total specific surface area of, 315

**Adsorption**  
isotherm equations associated with gamma micropore-size distribution and their application for characterizing microporous solids, 1

of Na and chloride ions at rutile/electrolyte interface - parameters of electric double layer, 39

properties of hydrothermally modified controlled porous glasses; hydrothermally treated controlled porous glasses (CPGs), 13

simple method for evaluating isotherm parameters for, from dilute solutions on solids, 287

**Alloy**  
CN 108 tubes; effect of service conditions on corrosion performance of, in MSF desalinators, 457

FeTi; oxidation behaviour of, 495

**Aluminium**  
effect of pretreatment on textural characteristics of alumina-supported Ni-W catalyst, 443

influence of Al ions on kinetics of nucleation-growth of potassium dihydrogen phosphate from aqueous solutions, 221

inhibition of Al corrosion in alkaline medium: influence of hard bases, 337

morphology and substructure of SiC whisker in SiCw/Al composite, 343

structural characterization of alumina metastable phases in plasma sprayed deposits, 299

**Antimony**  
dielectric properties of La, Cd or Nb substituted-Bi<sub>3</sub>Pb<sub>4</sub>Sb<sub>5</sub>O<sub>21</sub> solid solutions, 321

experimental study of non-stoichiometry of caesium antimonide  $\approx$  Cs<sub>3</sub>Sb, 189

**Barium**  
EPR evidence for compensating defects in BaTiO<sub>3</sub> grain boundary barrier layer capacitors, 239

further study on phase transition of BaTb<sub>2</sub>-Mn<sub>2</sub>O<sub>7</sub>, 83

physical properties of BaNi<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub> in high temperature region, 123

synthesis and phase transition of orthorhombic BaGd<sub>2</sub>Mn<sub>2</sub>O<sub>7</sub> phase, 389

research on system BaO-La<sub>2</sub>O<sub>3</sub>-CuO-O: join Ba<sub>2</sub>CuO<sub>3</sub>+ $\delta$ -Ba<sub>1.33</sub>La<sub>0.67</sub>CuO<sub>3</sub>+ $\delta$ , 147  
solid solution La<sub>2-x</sub>Ba<sub>1+x</sub>-CuO<sub>5-x/2+\delta</sub>, 363

V<sub>k</sub> centres, energy transfer and thermoluminescence of Eu activated LiBaF<sub>3</sub>, 353

**Bismuth**  
dielectric properties of La, Cd or Nb substituted-Bi<sub>3</sub>Pb<sub>4</sub>Sb<sub>5</sub>O<sub>21</sub> solid solutions, 321

glass transition study of Bi<sub>x</sub>Se<sub>1-x</sub> materials, 535

**Boron**  
effect of boriding surface treatment on hydrogen embrittlement of UNI 30Ni-CrMo12, 111

exoelectron emission accompanying structural transformation in metallic glasses Fe<sub>80-x</sub>Cr<sub>x</sub>B<sub>20</sub>, 399

influence of laser carbo-nitro-boriding on metallic surface properties, 279

**Brittleness**  
low-temperature; critical crack size for, of mild steel in tension of centre-cracked sheet, 429

**Cadmium**  
dielectric properties of La, Cd or Nb substituted-Bi<sub>3</sub>Pb<sub>4</sub>Sb<sub>5</sub>O<sub>21</sub> solid solutions, 321

polymeric 1-D linear-chain piperidinium and morpholinium trichlorocadmates (II): synthesis and structural, thermal and electrical properties, 25

X-band EPR studies of hyperfine and superhyperfine structure of Mn<sup>2+</sup> ions in polycrystalline CdO, 71

**Caesium**  
experimental study of non-stoichiometry of caesium antimonide  $\approx$  Cs<sub>3</sub>Sb, 189

**Calcium**  
luminescent Eu<sup>3+</sup> ion as probe of lanthanide impurities in crystallized gypsum, 175

X-ray investigation of orthorhombic  $\text{Ca}_{1.66}\text{Sr}_{0.34}\text{CuO}_3$ , 435

**Capacitors**  
 $\text{BaTiO}_3$  grain boundary barrier layer; EPR evidence for compensating defects in, 239

**Carbon dioxide**  
 interaction with, at ambient temperature; surface characterization of zirconium oxide, 247

**Catalyst**  
 alumina-supported Ni-W; effect of pretreatment on textural characteristics of, 443

**Catalytic activity**  
 and textural properties and surface chemistry in cyclohexene skeletal isomerization of acid treated natural sepiolites, 51

**Ceramics**  
 sol-precipitate  $\text{LiNbO}_3$ ; fabrication and electrical behaviour of, with addition of  $(\text{LiF} + \text{MgF}_2)$ , 413  
 $\text{ZnO}$ ; scanning electron acoustic microscopy of, 215

**Cerium**  
 syntheses and surface properties determination of ammonium, methylamine and ethylamine phases of Ce(IV) and Th(IV) phosphates, 99  
 thermal characterization of synthesized  $\text{Y}_2\text{O}_3-\text{CeO}_2-\text{ZrO}_2$ , 511

**Charge density**  
 and high pressure properties; correlation between, in Si and Ge, 209

**Chloride**  
 adsorption of Na and chloride ions at rutile/electrolyte interface – parameters of electric double layer, 39

**Chromium**  
 effect of boriding surface treatment on hydrogen embrittlement of UNI 30Ni-CrMo12, 111  
 electrochemical behaviour of graphite intercalated with chromium trioxide in alkaline electrolyte, 269  
 exoelectron emission accompanying structural transformation in metallic glasses  $\text{Fe}_{80-x}\text{Cr}_x\text{B}_{20}$ , 399

**Clay soils**  
 kinetic mechanism of steel corrosion in, by impedance measurements, 373

**Clusters**  
 clustering of atoms in molten  $\text{Fe}_{1-y}\text{Ti}_y\text{N}_x$ , 163

**Concrete**  
 low-frequency impedance study of steel/concrete interface, 525

**Copper**  
 kinetics of Cu(I) transfer through solid Cul–Cu interface, 473  
 research on system  $\text{BaO}-\text{La}_2\text{O}_3-\text{CuO}-\text{O}$ : join  $\text{Ba}_2\text{CuO}_3+\delta-\text{Ba}_{1.33}\text{La}_{0.67}\text{CuO}_3+\delta$ , 147  
 solid solution  $\text{La}_{2-x}\text{Ba}_{1+x}$ - $\text{CuO}_{5-x/2+\delta}$ , 363  
 X-ray investigation of orthorhombic  $\text{Ca}_{1.66}\text{Sr}_{0.34}\text{CuO}_3$ , 435

**Corrosion**  
 Al: inhibition of, in alkaline medium; influence of hard bases, 337  
 performance; effect of service conditions on, of alloy CN 108 tubes in MSF desalinators, 457  
 steel; kinetic mechanism of, in clay soils by impedance measurements, 373

**Crystal**  
 luminescent Eu<sup>3+</sup> ion as probe of lanthanide impurities in crystallized gypsum, 175  
 Si single; amorphous film growth of electroless Os deposition on, studied by analytical scanning transmission electron microscope, 131  
 synthesis and phase transition of orthorhombic  $\text{BaGd}_2\text{Mn}_2\text{O}_7$  phase, 389

**X-band EPR studies of hyperfine and superhyperfine structure of Mn<sup>2+</sup> ions in polycrystalline CdO**, 71

X-ray investigation of orthorhombic  $\text{Ca}_{1.66}\text{Sr}_{0.34}\text{CuO}_3$ , 435

**Cyclohexene skeletal isomerization**  
 of acid treated natural sepiolites; textural properties, surface chemistry and catalytic activity in, 51

**Defects**  
 compensating; EPR evidence for, in  $\text{BaTiO}_3$  grain boundary barrier layer capacitors, 239

**Desalinators**  
 MSF; effect of service conditions on corrosion performance of alloy CN 108 tubes in, 457

**Dielectric properties**  
 of La, Cd or Nb substituted- $\text{Bi}_3\text{Pb}_4\text{Sb}_5\text{O}_{21}$  solid solutions, 321

**Ductile-to-brittle transition**  
 effect of precipitation and grain size on, in mild steels, 157

**Electrical properties**  
 electrical behaviour and fabrication of sol-

precipitate  $\text{LiNbO}_3$  ceramics with addition of  $(\text{LiF} + \text{MgF}_2)$ , 413

and structural and thermal properties and synthesis: polymeric 1-D linear-chain piperidinium and morpholinium trichlorocadmates(II), 25

**Electrochemistry**

- applications of SIMS in, 327
- electrochemical behaviour of graphite intercalated with chromium trioxide in alkaline electrolyte, 269

**Embrittlement**

- hydrogen; effect of boriding surface treatment on, of UNI 30NiCrMo12, 111

**Energy transfer**

- and  $V_K$  centres and thermoluminescence of Eu activated  $\text{LiBaF}_3$ , 353

**Europium**

- activated  $\text{LiBaF}_3$ ;  $V_K$  centres, energy transfer and thermoluminescence of, 353
- luminescent  $\text{Eu}^{3+}$  ion as probe of lanthanide impurities in crystallized gypsum, 175

**Exoelectron emission**

- accompanying structural transformation in metallic glasses  $\text{Fe}_{80-x}\text{Cr}_x\text{B}_{20}$ , 399

**Fabrication**

- and electrical behaviour of sol-precipitate  $\text{LiNbO}_3$  ceramics with addition of  $(\text{LiF} + \text{MgF}_2)$ , 413

**Fibre**

- thermal conductivity of short-fibre composites, 405

**Film(s)**

- amorphous, growth of electroless Os deposition on Si single crystal studied by analytical scanning transmission electron microscope, 131
- Li doped zinc oxide photoluminescence, prepared by spray pyrolysis, 383
- $\text{WO}_3$ ; internal stress in growing, 87

**Gadolinium**

- synthesis and phase transition of orthorhombic  $\text{BaGd}_2\text{Mn}_2\text{O}_7$  phase, 389

**Germanium**

- and Si; correlation between high pressure properties and charge density in, 209

**Glasses**

- glass transition study of  $\text{Bi}_x\text{Se}_{1-x}$  materials, 535
- hydrothermally treated controlled porous (CPGs): adsorption properties of hydrothermally modified controlled porous glasses, 13

metallic  $\text{Fe}_{80-x}\text{Cr}_x\text{B}_{20}$ ; exoelectron emission accompanying structural transformation in, 399

**Graphite**

- electrochemical behaviour of, intercalated with chromium trioxide in alkaline electrolyte, 269

**Gypsum**

- crystallized; luminescent  $\text{Eu}^{3+}$  ion as probe of lanthanide impurities in, 175

**Hard bases**

- influence of: inhibition of Al corrosion in alkaline medium, 337

**High pressure properties**

- and charge density; correlation between, in Si and Ge, 209

**Impedance**

- low-frequency, study of steel/concrete interface, 525
- measurements; kinetic mechanism of steel corrosion in clay soils by, 373

**Internal stress**

- in growing  $\text{WO}_3$  films, 87

**Iron**

- clustering of atoms in molten  $\text{Fe}_{1-y}\text{Ti}_y\text{N}_x$ , 163
- critical crack size for low-temperature brittleness of mild steel in tension of centre-cracked sheet, 429
- effect of precipitation and grain size on ductile-to-brittle transition in mild steels, 157
- exoelectron emission accompanying structural transformation in metallic glasses  $\text{Fe}_{80-x}\text{Cr}_x\text{B}_{20}$ , 399
- kinetic mechanism of steel corrosion in clay soils by impedance measurements, 373
- low-frequency impedance study of steel/concrete interface, 525
- oxidation behaviour of FeTi alloy, 495

**Isomerization**

- cyclohexene skeletal; textural properties, surface chemistry and catalytic activity in, of acid treated natural sepiolites, 51

**Isotherm equations**

- adsorption, associated with gamma micro-pore-size distribution and their application for characterizing microporous solids, 1

**Isotherm parameters**

- simple method for evaluating, for adsorption from dilute solutions on solids, 287

**Kinetics**

- of Cu(I) transfer through solid CuI-Cu interface, 473
- influence of Al ions on, of nucleation-growth of potassium dihydrogen phosphate from aqueous solutions, 221
- kinetic mechanism of steel corrosion in clay soils by impedance measurements, 373
- phase transformation-related, in oxidation of Mn mixed oxide with spinel structure, 199

**Lanthanum**

- dielectric properties of La, Cd or Nb substituted-Bi<sub>3</sub>Pb<sub>4</sub>Sb<sub>5</sub>O<sub>21</sub> solid solutions, 321
- luminous Eu<sup>3+</sup> ion as probe of lanthanide impurities in crystallized gypsum, 175
- phase equilibria in portion of system La<sub>2</sub>O<sub>3</sub>-K<sub>2</sub>O-P<sub>2</sub>O<sub>5</sub> rich in P<sub>2</sub>O<sub>5</sub>, 487
- research on system BaO-La<sub>2</sub>O<sub>3</sub>-CuO-O: join Ba<sub>2</sub>CuO<sub>3</sub>+ $\delta$ -Ba<sub>1.33</sub>La<sub>0.67</sub>CuO<sub>3</sub>+ $\delta$ , 147
- solid solution La<sub>2-x</sub>Ba<sub>1+x</sub>-CuO<sub>3-x/2+ $\delta$</sub> , 363

**Laser carbo-nitro-boriding**

- influence of, on metallic surface properties, 279

**Lead**

- dielectric properties of La, Cd or Nb substituted-Bi<sub>3</sub>Pb<sub>4</sub>Sb<sub>5</sub>O<sub>21</sub> solid solutions, 321

**Lithium**

- fabrication and electrical behaviour of sol-precipitate LiNbO<sub>3</sub> ceramics with addition of (LiF + MgF<sub>2</sub>), 413
- Li doped zinc oxide photoluminescence films prepared by spray pyrolysis, 383
- V<sub>k</sub> centres, energy transfer and thermoluminescence of Eu activated LiBaF<sub>3</sub>, 353

**Luminescence**

- Li doped zinc oxide photo-, films prepared by spray pyrolysis, 383
- luminous Eu<sup>3+</sup> ion as probe of lanthanide impurities in crystallized gypsum, 175
- thermo-, V<sub>k</sub> centres and energy transfer of Eu activated LiBaF<sub>3</sub>, 353

**Magnesium**

- fabrication and electrical behaviour of sol-precipitate LiNbO<sub>3</sub> ceramics with addition of (LiF + MgF<sub>2</sub>), 413

**Manganese**

- further study on phase transition of BaTb<sub>2</sub>-Mn<sub>2</sub>O<sub>7</sub>, 83
- phase transformation-related kinetics in oxi-

dation of Mn mixed oxide with spinel structure, 199

synthesis and phase transition of orthorhombic BaGd<sub>2</sub>Mn<sub>2</sub>O<sub>7</sub> phase, 389

X-band EPR studies of hyperfine and superhyperfine structure of Mn<sup>2+</sup> ions in poly-crystalline CdO, 71

**Metallic surface properties**

- influence of laser carbo-nitro-boriding on, 279

**Microporous activated carbons**

- heterogeneous; total specific surface area of, 315

**Microporous solids**

- adsorption isotherm equations associated with gamma micropore-size distribution and their application for characterizing, 1

**Molybdenum**

- effect of boriding surface treatment on hydrogen embrittlement of UNI 30NiCrMo12, 111

**Morphology**

- and substructure of SiC whisker in SiCw/Al composite, 343

**Nickel**

- effect of boriding surface treatment on hydrogen embrittlement of UNI 30NiCrMo12, 111
- effect of pretreatment on textural characteristics of alumina-supported Ni-W catalyst, 443
- physical properties of BaNi<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub> in high temperature region, 123

**Niobium**

- dielectric properties of La, Cd or Nb substituted-Bi<sub>3</sub>Pb<sub>4</sub>Sb<sub>5</sub>O<sub>21</sub> solid solutions, 321
- fabrication and electrical behaviour of sol-precipitate LiNbO<sub>3</sub> ceramics with addition of (LiF + MgF<sub>2</sub>), 413

**Osmium deposition**

- electroless; amorphous film growth of, on Si single crystal studied by analytical scanning transmission electron microscope, 131

**Oxidation**

- behaviour of FeTi alloy, 495
- phase transformation-related kinetics in, of Mn mixed oxide with spinel structure, 199

**Phase equilibria**

- in portion of system La<sub>2</sub>O<sub>3</sub>-K<sub>2</sub>O-P<sub>2</sub>O<sub>5</sub> rich in P<sub>2</sub>O<sub>5</sub>, 487

**Phase transition**  
 further study on, of  $\text{BaTb}_2\text{Mn}_2\text{O}_7$ , 83  
 and synthesis of orthorhombic  $\text{BaGd}_2\text{Mn}_2\text{O}_7$  phase, 389

**Phosphorus**  
 influence of Al ions on kinetics of nucleation-growth of potassium dihydrogen phosphate from aqueous solutions, 221  
 phase equilibria in portion of system  $\text{La}_2\text{O}_3-\text{K}_2\text{O}-\text{P}_2\text{O}_5$  rich in  $\text{P}_2\text{O}_5$ , 487

**physical properties** of  $\text{BaNi}_2(\text{PO}_4)_2$  in high temperature region, 123

**syntheses and surface properties determination** of ammonium, methylamine and ethylamine phases of Ce(IV) and Th(IV) phosphates, 99

**Photoluminescence**  
 Li doped zinc oxide, films prepared by spray pyrolysis, 383

**Physical properties**  
 of  $\text{BaNi}_2(\text{PO}_4)_2$  in high temperature region, 123

**Plasma sprayed deposits**  
 structural characterization of alumina metastable phases in, 299

**Polymers**  
 polymeric 1-D linear-chain piperidinium and morpholinium trichlorocadmates(II): synthesis and structural, thermal and electrical properties, 25

**Potassium**  
 influence of Al ions on kinetics of nucleation-growth of potassium dihydrogen phosphate from aqueous solutions, 221  
 phase equilibria in portion of system  $\text{La}_2\text{O}_3-\text{K}_2\text{O}-\text{P}_2\text{O}_5$  rich in  $\text{P}_2\text{O}_5$ , 487

**Pulsating current**  
 effect of, on limiting current and deposit structure of Ag plating system, 503

**Rutile**  
 adsorption of Na and chloride ions at rutile/electrolyte interface – parameters of electric double layer, 39

**Scanning electron acoustic microscopy** of  $\text{ZnO}$  ceramics, 215

**Scanning transmission electron microscope** analytical; amorphous film growth of electroless Os deposition on Si single crystal studied by, 131

**Selenium**  
 glass transition study of  $\text{Bi}_x\text{Se}_{1-x}$  materials, 535

**Sepiolites**  
 acid treated natural; textural properties, surface chemistry and catalytic activity in cyclohexene skeletal isomerization of, 51

**Silicon**  
 and Ge; correlation between high pressure properties and charge density in, 209 morphology and substructure of  $\text{SiC}$  whisker in  $\text{SiCw}/\text{Al}$  composite, 343

single crystal; amorphous film growth of electroless Os deposition on, studied by analytical scanning transmission electron microscope, 131

**Silver plating system**  
 effect of pulsating current on limiting current and deposit structure of, 503

**Sodium**  
 and chloride ions; adsorption of, at rutile/electrolyte interface – parameters of electric double layer, 39

**Solid solution(s)**  
 $\text{La}_{2-x}\text{Ba}_{1+x}\text{CuO}_{5-x/2+g}$ ; research on system  $\text{BaO}-\text{La}_2\text{O}_3-\text{CuO}-\text{O}_2$ , 363

$\text{La}, \text{Cd}$  or  $\text{Nb}$  substituted- $\text{Bi}_3\text{Pb}_4\text{Sb}_5\text{O}_{21}$ ; dielectric properties of, 321

**Spectroscopy**  
 applications of SIMS in electrochemistry, 327

EPR evidence for compensating defects in  $\text{BaTiO}_3$  grain boundary barrier layer capacitors, 239

X-band EPR studies of hyperfine and superhyperfine structure of  $\text{Mn}^{2+}$  ions in polycrystalline  $\text{CdO}$ , 71

**Spinel structure**  
 phase transformation-related kinetics in oxidation of Mn mixed oxide with, 199

**Spray pyrolysis**  
 Li doped zinc oxide photoluminescence films prepared by, 383

**Steel(s)**  
 corrosion; kinetic mechanism of, in clay soils by impedance measurements, 373  
 low-frequency impedance study of steel/concrete interface, 525  
 mild; critical crack size for low-temperature brittleness of, in tension of centre-cracked sheet, 429  
 mild; effect of precipitation and grain size on ductile-to-brittle transition in, 157

**Strontium**  
 X-ray investigation of orthorhombic  $\text{Ca}_{1.66}\text{Sr}_{0.34}\text{CuO}_3$ , 435

**Structural properties**  
 structural characterization of alumina

- metastable phases in plasma sprayed deposits, 299
- and thermal and electrical properties and synthesis: polymeric 1-D linear-chain piperidinium and morpholinium trichlorocadmates(II), 25
- Substructure**
  - and morphology of SiC whisker in SiCw/Al composite, 343
- Surface**
  - effect of boriding surface treatment on hydrogen embrittlement of UNI 30NiCrMo12, 111
  - influence of laser carbo-nitro-boriding on metallic surface properties, 279
  - surface characterization of zirconium oxide; interaction with CO<sub>2</sub> at ambient temperature, 247
  - syntheses and surface properties determination of ammonium, methylamine and ethylamine phases of Ce(IV) and Th(IV) phosphates, 99
  - textural properties, surface chemistry and catalytic activity in cyclohexene skeletal isomerization of acid treated natural sepiolites, 51
  - total specific surface area of heterogeneous microporous activated carbons, 315
- Syntheses**
  - and surface properties determination of ammonium, methylamine and ethylamine phases of Ce(IV) and Th(IV) phosphates, 99
- Synthesis**
  - and phase transition of orthorhombic BaGd<sub>2</sub>Mn<sub>2</sub>O<sub>7</sub> phase, 389
  - and structural, thermal and electrical properties: polymeric 1-D linear-chain piperidinium and morpholinium trichlorocadmates(II), 25
- Terbium**
  - further study on phase transition of BaTb<sub>2</sub>-Mn<sub>2</sub>O<sub>7</sub>, 83
- Textural properties**
  - effect of pretreatment on textural characteristics of alumina-supported Ni-W catalyst, 443
  - and surface chemistry and catalytic activity in cyclohexene skeletal isomerization of acid treated natural sepiolites, 51
- Thermal properties**
  - and structural and electrical properties and synthesis: polymeric 1-D linear-chain piperidinium and morpholinium trichlorocadmates(II), 25
  - thermal characterization of synthesized Y<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub>-ZrO<sub>2</sub>, 511
  - thermal conductivity of short-fibre composites, 405
- Thermoluminescence**
  - and V<sub>k</sub> centres and energy transfer of Eu activated LiBaF<sub>3</sub>, 353
- Thorium**
  - syntheses and surface properties determination of ammonium, methylamine and ethylamine phases of Ce(IV) and Th(IV) phosphates, 99
- Titanium**
  - adsorption of Na and chloride ions at rutile/electrolyte interface - parameters of electric double layer, 39
  - clustering of atoms in molten Fe<sub>1-y</sub>Ti<sub>y</sub>N<sub>x</sub>, 163
  - EPR evidence for compensating defects in BaTiO<sub>3</sub> grain boundary barrier layer capacitors, 239
  - oxidation behaviour of FeTi alloy, 495
- Tungsten**
  - effect of pretreatment on textural characteristics of alumina-supported Ni-W catalyst, 443
  - internal stress in growing WO<sub>3</sub> films, 87
- X-ray investigation**
  - of orthorhombic Ca<sub>1.66</sub>Sr<sub>0.34</sub>CuO<sub>3</sub>, 435
- Yttrium**
  - thermal characterization of synthesized Y<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub>-ZrO<sub>2</sub>, 511
- Zinc**
  - Li doped zinc oxide photoluminescence film prepared by spray pyrolysis, 383
  - scanning electron acoustic microscopy of ZnO ceramics, 215
- Zirconium**
  - surface characterization of zirconium oxide; interaction with CO<sub>2</sub> at ambient temperature, 247
  - thermal characterization of synthesized Y<sub>2</sub>O<sub>3</sub>-CeO<sub>2</sub>-ZrO<sub>2</sub>, 511

1

1